

Notice of Allowability

Application No.

09/717,187

Examiner

Tuan A Vu

Applicant(s)

JOSHI ET AL.

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2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/1/2004.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☒ The drawings filed on 11/20/2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

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DETAILED ACTION

1. This action is responsive to the Applicant's response filed 6/1/2004.

As indicated in Applicant's response, no claims have been amended. Claims 1-24 are pending in the office action.

EXAMINER'S AMENDMENT

2. The specifications have been amended as follows:

- On the 2nd paragraph on page 1, at line 8, after '...Serial Number 09/649,310' insert the following: '(now issued as US Pat. No. 6671825)' before 'filed on August...';
- On the 3rd paragraph on page 1, at line 12, after '...Serial Number 09/717,162' insert the following: '(now issued as US Pat. No. 6671826)' before 'filed on the same...';
- On the 4th paragraph on page 1, at line 17, after '...Serial Number 09/717,161' insert the following: '(now issued as US Pat. No. 6745344)' before 'filed on the same ...'.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

3. Claims 1-24 are allowed.

The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination fails to teach or suggest the following claimed features:

A method of debugging a first software program for dynamically linking a second software program to the first program without de-allocating the first software program from volatile memory, comprising (i) preserving a memory state of a preserved portion of the first program; executing the second software program and (ii) if execution of the second program would otherwise cause modification to targeted data that is in preserved

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portion of the first program, then making a copy of the targeted data and modifying the copy of the targeted data to generate a modified copy of the targeted data without modifying the targeted data that is in the preserved portion of the first software program as recited in claims 1, 9, and 17.

Gorshkov, (USPN: 6,490,721) in a method of software debugging using dynamic linking to link user actions into an existing executable image or target program, discloses making copy of the target program being a parent process with a child process which attaches to and patches into the parent process by inserting routines into the targeted portions of the parent process, making calls to library routines so that when the debugging routines called by the child process have done patching the target portions in the image of the target portions contained in the parent process, the target portions in the parent process contain the modification resulting from the library routines and patching calls. But Gorshkov does not teach that if execution of the child program would otherwise cause modification to targeted data that is in preserved portion of the parent program, then making a copy of such targeted data and modifying the copy of the targeted data to generate a modified copy of the targeted data without modifying the targeted data that is in the preserved portion of the first or parent software program as recited in (ii).

Khoyi, (USPN: 6,263,491), teaches an child parent linking process used in integration of repository-based objects where a child object is a copy of the parent object, and discloses making modifications to the child object then linking the modified portions of the child object to the execution process of the parent but that the data which is linked remains part of the child object rather than being integrated in the parent object. But

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Khoyi does not teach a debugging process with the limitations recited in (i) nor does Khoyi teach if execution of the child program would otherwise cause modification to targeted data that is in preserved portion of the parent program, then making a copy of such targeted data and modifying the copy of the targeted data to generate a modified copy of the targeted data without modifying the targeted data that is in the preserved portion of the first or parent software program as recited in (ii) from above.

Conclusion

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (703)305-7207. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

or: (703) 746-8734 (for informal or draft communications, please consult

Examiner before using this number)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. , 22202. 4th Floor(Receptionist).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
August 20, 2004

Kakali Chaki
KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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